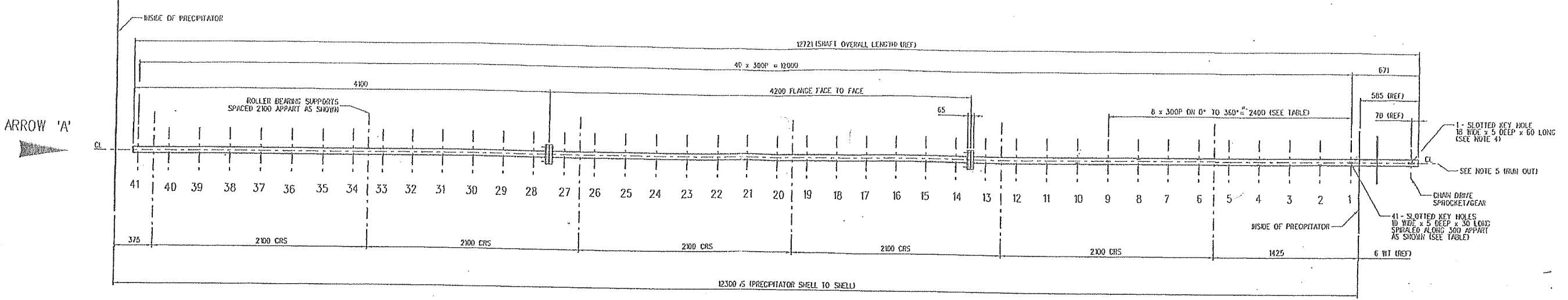


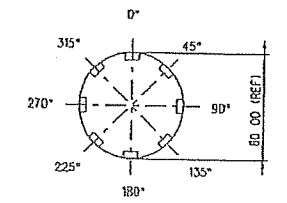
REFERENCE DRAWINGS	DESCRIPTION
0.45-23544-001-50	BOILER 1-6 PRECIPITATOR RAPPER DRIVES PLATE RAPPING DEVICE DETAILS
0.45-18726	PRECIPITATOR INTERNALS ARRANGEMENT & DETAILS
0.45-23543	BOILER 1-6 PRECIPITATOR RAPPER DRIVE 571 SHAFT FOR DRIVEWHEEL DETAILS
0.45-12559-001-01	BOILER 1-6 PRECIPITATOR DELTA 182 PLATE RAPPING DEVICE ASSEMBLY & DETAILS
0.45-12180-001-03	BOILER 1-6 PRECIPITATOR DISCHARGE FRANK RAPPING DEVICE ASSEMBLY & DETAILS
20.45-52886-001-01	UNIT 3 PRECIPITATOR DISCHARGE RAPPING HAMMERS

DESIGN CONDITIONS	
DESIGN CODE:- SEP	
DESIGN OUTPUT TORQUE	1603 Nm
DESIGN TEMPERATURE	137 °C
SHAFT SPEED	2.1 rpm
OPERATING TEMPERATURE	120 °C
PHOS	10
JOINT EFFICIENCY	1.0
CORROSION ALLOWANCE	3 mm

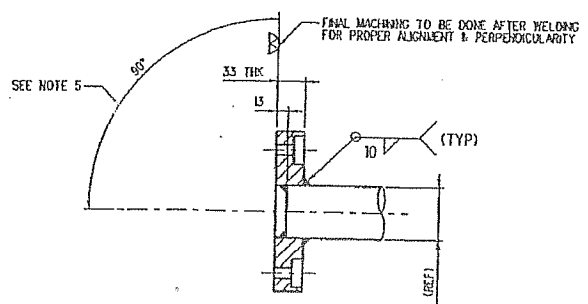


ARRANGEMENT

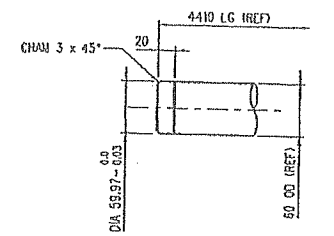
ARROW 'A'



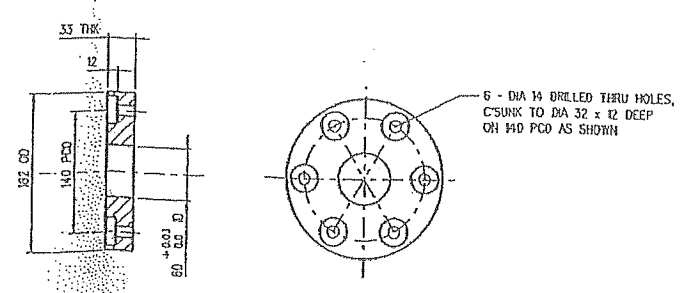
VIEW ON ARROW 'A'
(SEE TABLE BELOW)



TYP. WELD DETAIL



SHAFT DETAIL
(MACHINE FLANGE CONNECTION SIDE ONLY)



FLANGE DETAIL

NOTES:-

1. REMOVE SHARP EDGES
2. MINIMUM FILLET WELD TO BE 10 mm
3. ALL WELDING PROCEDURES & WELDING QUALIFICATIONS IN ACCORDANCE WITH ESKOM STANDARD 36-775
4. KEY SLOT POSITION AND SIZE TO BE VERIFIED ON SITE DURING INSTALLATION
5. PERPENDICULARITY & CONCENTRICITY TO BE WITHIN 0.04mm DURING AND AFTER INSTALLATION
6. READ THIS DRAWING IN CONJUNCTION WITH REFERENCE DRAWINGS
7. MATERIAL CERTIFICATE OF SHAFT AND FLANGE REQUIRED

APPLICABLE ESKOM STANDARDS:-

- 36-775 WELDING SPECIFICATION
- 36-943 ESKOM ENGINEERING DOCUMENTATION
- QM-5B CONTRACTOR QUALITY REQUIREMENT
- 240-43156827 ESKOM WELDING RULEBOOK
- 240-56241933 PLANT CONSTRUCTION REPAIR AND MAINTANANCE WELDING ACTIVITIES STANDARD

NDE REQUIREMENTS:-

- 100% VISUAL & DIMENSIONAL INSPECTION DURING ALL STAGES OF WORK
- 100% PT ON ALL COMPLETED WELDS

TOLERANCE INSTRUCTION	SURFACE ROUGHNESS ISO R46B Ra VALUES
± 0,02 ON DIAMETERS	3,2
± 0,10 ON LENGTHS	1,6
UNLESS OTHERWISE STATED	0,8

SLOTTED KEY HOLES INFORMATION TABLE																																									
KEY NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
ANGLE	0°	45°	90°	135°	180°	225°	270°	315°	0°	45°	90°	135°	180°	225°	270°	315°	0°	45°	90°	135°	180°	225°	270°	315°	0°	45°	90°	135°	180°	225°	270°	315°	0°	45°	90°	135°	180°	225°	270°	315°	0°

ITEM NO.	REQD.	DESCRIPTION	MATERIAL	REMARKS
3	12	HEX HD SCREW M12 x 55 LG	SA 1700 GR B.B	C.W. EX. INT.
2	3	SOLID SHAFT 60 OD x 4410 LG	EN3A	CUT & TRIM TO SIZE
1	4	FLANGE 182 OD x 60 ID x 33 THK	EN3A	SEE DETAIL

NO.	DATE	BY	CHKD BY	APP.	REVISION
1	26/07/10	Y.B.	A.N.	U.G.	

Eskom		0.45/23544	002/01
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DRAFT